United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/768,344	01/30/2004	Simon Garry Moore	1010.69525 6373	
24978	7590 08/11/2005		EXAMINER	
GREER, BURNS & CRAIN		KENNEDY, JOSHUA T		
300 S WACK	ER DR			
25TH FLOOR			ART UNIT	PAPER NUMBER
CHICAGO, IL 60606		3679		

DATE MAILED: 08/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)		
	10/768,344	MOORE, SIMO	MOORE, SIMON GARRY	
Office Action Summary	Examiner	Art Unit		
·	Joshua T. Kennedy	3679	11/	
The MAILING DATE of this communication apperiod for Reply		the correspondence	address	
A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a re - If NO period for reply is specified above, the maximum statutory perio Failure to reply within the set or extended period for reply will, by statu- Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	l. 1.136(a). In no event, however, may a replepty within the statutory minimum of thirty (3 d will apply and will expire SIX (6) MONTH tte, cause the application to become ABAN	y be timely filed 30) days will be considered tin S from the mailing date of this NDONED (35 U.S.C. § 133).	nely. communication.	
Status				
1) Responsive to communication(s) filed on 08	July 2005.			
2a) This action is FINAL . 2b) ⊠ Th	is action is non-final.			
3) Since this application is in condition for allow	ance except for formal matter	s, prosecution as to t	he merits is	
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D.	11, 453 O.G. 213.		
Disposition of Claims			•	
4)⊠ Claim(s) <u>1,4,5,7-10,12,15-18,20 and 21</u> is/ar	e pending in the application			
4a) Of the above claim(s) <u>21</u> is/are withdrawn	, ,		•	
5) Claim(s) is/are allowed.	·			
6)⊠ Claim(s) <u>1,4,5,7-10,12,15-18 and 20</u> is/are re	eiected.			
7) Claim(s) is/are objected to.	,			
8) Claim(s) are subject to restriction and	or election requirement.			
Application Papers				
9)⊠ The specification is objected to by the Examir	oor			
10) ☐ The drawing(s) filed on is/are: a) ☐ ac		the Evaminer		
Applicant may not request that any objection to th			•	
Replacement drawing sheet(s) including the corre	• • •	• •	CED 1 121(d)	
11) The oath or declaration is objected to by the I	* * * * * * * * * * * * * * * * * * * *	•	, ,	
Priority under 35 U.S.C. § 119	Examinate Note the attached C		10-102.	
·		404) ())		
12) Acknowledgment is made of a claim for foreig	in priority under 35 U.S.C. § 1	19(a)-(d) or (f).		
a) All b) Some * c) None of:	ata hawa hawa wasakus d			
1. Certified copies of the priority document		Jiantian Na		
2. Certified copies of the priority document	• •	· · · · · · · · · · · · · · · · · · ·	al Ctara	
 Copies of the certified copies of the pri application from the International Bure 	· · · · · ·	ceived in this Nation	ai Stage	
* See the attached detailed Office action for a lis		ceived		
occ the attached detailed office action for a lis	,	ceiveu.	•	
Attachment(s)				
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) 	4) LInterview Sun Paper No(s)/N	nmary (PTO-413) Mail Date		
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/06 Paper No(s)/Mail Date		rmal Patent Application (P	TO-152)	
J.S. Patent and Trademark Office	Action Summary	Part of Paper No./Mail	Date 20050726	

Art Unit: 3679

DETAILED ACTION

Applicant's election without traverse of the species of Figures 4 and 5, Claims 1,4,5,7,8,9,10,12,15,16,17,18, 20 and 21 in the reply filed on 7/8/05 is acknowledged.

Claim 21 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Species 1, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 7/8/05

Claims 1,4,5,7,8,9,10,12,15,16,17,18, and 20 have been examined.

Specification

The disclosure is objected to because of the following informalities:

Lines 1-2 on page 16 of the Specification should read --section (10) of the body--.

Lines 6-7 on page 16 of the Specification refer to "the securing apparatus (1)" in Figure 5. There is no reference number 1 in Figure 5.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 17, 18, and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to Claims 17 and 18. These claims are considered indefinite because they do not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). In addition to being grammatically incorrect, what is set forth is an action step of inserting a releasing tool without defining any type of structure, making the claim indefinite because the releasing tool is not a positive element of the step.

Regarding Claim 20. This claim is considered indefinite because, based on the preamble of Claims 1 and 20, it is unclear whether the applicant is claiming solely the tool or is claiming the tool in combination with the securing apparatus. Claim 20 has to further limit the securing apparatus or else must not refer to the securing apparatus of Claim 1. The examiner will presume that this claim is drawn to and is limited by the securing apparatus. If this presumption is incorrect, the releasing tool would be subject to restriction.

Art Unit: 3679

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,4,5,7,8,9,10,12,16,17,18, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Howard (US Patent 3,473,202).

As to Claim 1. Howard discloses a securing apparatus comprising:

a deformable body (A), wherein the body is configured to provide a secure interference fit with at least one article to which it is fitted (Col 1, Lines 35-43), and an aperture within the body (16), wherein the aperture is configured to accept a releasing tool (14),

wherein the securing apparatus is only unlocked by the operation of the releasing tool with respect to the body and remains locked at all other times (Col 1, Lines 35-43).

As to Claim 4. Howard discloses the body joining a plurality of articles together (Fig 4).

Art Unit: 3679

As to Claim 5. Howard discloses the body containing at least one slot (12) that is substantially perpendicular to the aperture and which bisects at least one side of the aperture (Fig 1).

As to Claim 7. Howard discloses the body containing a plurality of apertures (10, 13, 16, 23).

As to Claim 8. Howard discloses the securing apparatus securing a plurality of articles, each of which can be released individually (Fig 4).

As to Claim 9. Howard discloses the absence of the releasing tool from the aperture ensuring that the securing device is in a locked position by default (Col 1, Lines 35-43).

As to Claim 10. Howard inherently discloses the dimensions of the body of the securing device when the releasing tool is not operated are such that the securing apparatus cannot be connected to the article to which it is to be secured (Col 1, Lines 35-43).

As to Claim 12. Howard discloses the body is configured to include at least one seal (B) that itself is capable of stopping any leakage of material from within a secured article.

As to Claim 16. Howard discloses at least one article to be secured being solid (Claim 1, Line 1).

Art Unit: 3679

As to Claim 17. Howard discloses a securing apparatus, comprising:

a deformable body (A), wherein the body is configured to provide a secure interference fit with at least one article to which it is fitted (CoI 1, Lines 35-43), and an aperture within the body (16), wherein the aperture is configured to accept a releasing tool (14).

further including inserting the releasing tool within the aperture until the securing apparatus is unlocked (Col 1, Lines 35-43).

As to Claim 18. Howard discloses a securing apparatus, comprising:

a deformable body (A), wherein the body is configured to provide a secure interference fit with at least one article to which it is fitted (CoI 1, Lines 35-43), and an aperture within the body (16), wherein the aperture is configured to accept a releasing tool (14),

further including inserting and partially rotating the releasing tool within the aperture until the securing apparatus is unlocked (Col 1, Lines 35-43).

As to Claim 20. Howard discloses the releasing tool (14) containing a threaded section that is configured so that the securing apparatus is unlocked by inserting the releasing tool into a complementary threaded area of the securing apparatus, to a point where the required widening of an area of the aperture is achieved (Col 1, Lines 35-43).

Art Unit: 3679

Regarding Claims 17, 18, and 20. It is well established that a recitation with respect to the manner in which an apparatus is intended to be employed, i.e., a functional limitation, does not impose any structural limitation upon the claimed apparatus which differentiates it from a prior art reference disclosing the structural limitations of the claim. In re Pearson, 494 F.2d 1399, 181 USPQ 641 (CCPA 1974); In re Casey, 370 F.2d 576, 152 USPQ 235 (CCPA 1967); In re Otto, 312 F.2d 937, 136 USPQ 458 (CCPA 1963). Where the prior art reference is inherently capable of performing the function described in a functional limitation, such functional limitation does not define the claimed apparatus over such prior art reference, regardless of whether the prior art reference explicitly discusses such capacity for performing the recited function. In re Ludtke, 441 F.2d 660, 169 USPQ 563 (CCPA 1971). In addition, where there is reason to believe that such functional limitation may be an inherent characteristic of the prior art reference, Applicant is required to prove that the subject matter shown in the prior art reference does not possess the characteristic relied upon. In re Spada, 911 F.2d 705, 15 USPQ2d 1655 (Fed. Cir. 1990); <u>In re King</u>, 801 F.2d 1324, 1327, 231 USPQ 136, 138 (Fed. Cir. 1986); In re Ludtke, 441 F.2d at 664, 169 USPQ at 566 (CCPA 1971); In re Shreiber, F.2d at, 44 USPQ2d 1429 (Fed. Cir. 1997).

The prior art laid forth shows all of the structural elements claimed and is inherently capable of performing the functions as claimed. If applicant claims that it cannot, they need to review the claims to ensure that they have all of the necessary structural elements recited.

Art Unit: 3679

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all . obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Howard. Howard does not explicitly disclose at least one article to be secured being tubular, but discloses a "prestressed shaft gripping element." (Claim 1, Line 1). It would be obvious to one of ordinary skill in the art to utilize a tubular element as the shaft because this equivalent substitution would lead to a reduction of weight of the shaft being used regardless of application.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 4,190,378 to Stecklein cited to show an articulated joint utilizing Belleville spring seals in securing a plurality of articles together.

US 5,851,084 to Nishikawa cited to show a connector for securing a plurality of articles together.

US D342,891 to Marui cited to show a connector for securing a plurality of articles together and disengaging them individually .

Art Unit: 3679

US 5,096,327 to Ruland cited to show a connector for securing a plurality of articles together having a preloaded shape and, when deformed by a releasing tool, accepts a shaft.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua T. Kennedy whose telephone number is (571) 272-8297. The examiner can normally be reached on M-F: 7am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JTK 7/26/2005

> GREGORY J. BINDA PRIMARY EXAMINER